No. 9900367

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Frito-Lay North America, Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE , OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

POTATO

'FL 1867'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this nineteenth day of September, in the year two thousand and five.

Attest:

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Secretary of Agriculture

ICE LOCALLY. Include form number and date on all reproductions

Form Approved - OMB No. 0581-0055

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF OWNER
Frito-Lay North America, Inc.
BDA 2/9/05

2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME
RD 7-90-20

3. VARIETY NAME
FL 1867
BDA 4/19/05

4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)
7701 Legacy Drive
Plano, Texas 75024
BDA 2/9/05

5. TELEPHONE (Include area code)
-972-334-3822

6. FAX (Include area code)
972-334-5965

FOR OFFICIAL USE ONLY

PVPO NUMBER
9900367

FILING DATE
7/19/99

7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.)
Corporation

8. IF INCORPORATED, GIVE STATE OF INCORPORATION
Delaware

9. DATE OF INCORPORATION
8/8/89

10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. (First person listed will receive all papers)
Robert J. Jondle
Jondle & Associates PC
9085 East Mineral Cir., Suite 200
Centennial, CO 80112
BDA 4/19/05

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FILING AND EXAMINATION FEES:
$ 2450.00
DATE 7/19/99

CERTIFICATION FEE:
$ 682.00
DATE 8/10/05

11. TELEPHONE (Include area code)
202-783-6040

12. FAX (Include area code)
202-783-6031

13. E-MAIL
bnewland@rfek.com

14. CROP KIND (Common Name)
Potato

15. GENUS AND SPECIES NAME OF CROP
Solanum tuberosum

16. FAMILY NAME (Botanical)
Solanaceae

17. IS THE VARIETY A FIRST GENERATION HYBRID?
☐ YES ☒ NO

18. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse)

a. ☒ Exhibit A. Origin and Breeding History of the Variety
b. ☒ Exhibit B. Statement of Distinctness
c. ☒ Exhibit C. Objective Description of Variety
d. ☒ Exhibit D. Additional Description of the Variety (Optional)
e. ☒ Exhibit E. Statement of the Basis of the Owner's Ownership
f. ☒ Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository) statement
g. ☒ Filing and Examination Fee ($2,450), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office)

19. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? See Section 83(a) of the Plant Variety Protection Act
☐ YES (If "yes", answer items 20 and 21 below) ☒ NO (If "no," go to item 22)

20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?
☐ YES ☐ NO

21. IF "YES" TO ITEM 20, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED?
☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED

22. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES?
☐ YES ☒ NO
IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.)

23. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)?
☐ YES ☒ NO
IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.)

24. The owner declares that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate. Exhibit F

The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Owner(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF OWNER		SIGNATURE OF OWNER	
Thomas P. Schur			
NAME (Please print or type)		NAME (Please print or type)	
Thomas P. Schur			
CAPACITY OR TITLE	DATE	CAPACITY OR TITLE	DATE
Secretary, Recot, Inc.	9 July 1999		

(See reverse for instructions and information collection burden statement)

9900367
replaced
SPA 4/22/05

EXHIBIT A. Origin and Breeding History of the Variety

FL 1867 originated in the Frito-Lay, Inc., private breeding program. In 1989, a cross was made by Dr. Martin Cipar, the Frito-Lay plant breeder, between Atlantic and FL 162. Atlantic was chosen as a parent because of its high content of dry matter, good yield, and excellent quality when processed into potato chips. Atlantic is resistant to the potato cyst nematode *Globodera rostochiensis* race R01. FL 162 was noted for its tolerance to heat, resistance to Verticillium wilt, wide adaptation, high content of solids, and good quality when processed into potato chips, either fresh from the field or after a period of storage.

Botanical seeds of the cross Atlantic x FL 162 were grown in the Frito-Lay greenhouse at Rhinelander, Wisconsin, in 1989. A single tuber from each resulting seedling was planted in the field in 1990. The stage at which each seedling is represented by a single plant (hill) in the field is considered Year 1 in the Frito-Lay breeding program. At harvest, selections were made on the basis of tuber size, number, shape, and absence of external defects. All of the tubers of each selected plant were retained and from this point on each selected individual was propagated clonally. The tubers harvested from each selection in 1990 were planted to form a small plot in 1991 (Year 2). At harvest, further selection took place for tuber type, apparent yielding ability, and absence of internal or external defects. Selected plots were given an experimental number. The selection that later became FL 1867 was designated RD 7-90-20. Some of the tubers harvested in the second year plot were used for estimating solids content and chip quality while the remainder were used for seed for the Year 3 plot.

In 1992, RD 7-90-20 was planted in the Rhinelander field as a larger plot of approximately 200 plants. After passing visual selection at harvest, samples were again tested for solids content and chip quality at several intervals in the storage season. RD 7-90-20 was found to have a very high content of dry matter, usually higher than that of Atlantic, and excellent chip color both fresh from the field and after storage.

In 1993, RD 7-90-20 was grown in a replicated yield trial near Iola, Wisconsin, in a commercial potato field. Iola is typical of northern commercial potato production areas, in contrast to Rhinelander, which is a short-season area more suited to growing seed potatoes. In this trial, RD 7-90-20 again demonstrated good yield potential, very high solids content, good processing quality, as well as fairly early maturity.

In 1994, RD 7-90-20 was given the new designation "FL 1867" and entered in the national area trials program conducted in Florida, Texas, California, Washington, Main, Michigan, Wisconsin, North Dakota and New Mexico. The combined results of these trials indicated that FL 1867 had the most potential as an early off-field variety in fresh production areas of the U. S., but also some potential for storage. It was tested for resistance to cyst nematode (race R01) by Dr. Bill Brodie of the USDA/Cornell program in Ithaca, New York, and found to be resistant. This result has been repeated several times.

In 1996, small seedlots of FL 1867 were grown in semi-commercial trials in California, Florida, and Missouri, confirming that the variety is well adapted to these production areas.

The variety FL 1867 has been uniform and stable since its origin as a single plant in 1990. No variants of FL 1867 have been observed.

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EDR 4/22/05

EXHIBIT B. Statement of Distinctness

As a chipping variety to be grown principally for processing in fresh production areas, FL 1867 is most similar to Atlantic. FL 1867 can be distinguished from Atlantic in regard to the following traits:

Flower color: FL 1867 has white flowers (Royal Horticulture Society Colour value 155C). Atlantic flowers are pale purple violet in color (RHS value 82D).

Stem Pigmentation: Stems of FL 1867 have almost no anthocyanin pigmentation, whereas Atlantic has a moderate amount of anthocyanin pigmentation along the length of the stems.

Isozyme Pattern: Dr. David Douches of Michigan State University has conducted isozyme fingerprints of all available North American potato varieties and has not found any two varieties with the same pattern for the enzymes tested. Dr. Douches has established the isozyme fingerprint of FL 1867 as being distinct from that of any other variety he has tested, including other chipping varieties such as Atlantic and Snowden. See Exhibit D-1, Additional Description of the Variety, for the actual isozyme fingerprints of FL 1867, and the reference to Dr. Douches' methodology.

FORM APPROVED - OMB NO. 0581-0055

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY DIVISION
PLANT VARIETY PROTECTION OFFICE

EXHIBIT C
OBJECTIVE DESCRIPTION OF VARIETY
POTATO (*Solanum tuberosum* L.)

INSTRUCTIONS

The Objective Description Form:

The objective description form lists characteristics to be used as the basis for developing the description of potato varieties. It is designed to guide the applicant in describing a variety in detail so a meaningful comparison with other potato varieties can be accomplished. It is recommended that this form be completed in as much detail as possible to ensure an accurate description. Please fill in the requested data and place the appropriate number that describes the varietal characters typical of this potato variety and the reference varieties in the respective boxes.

Test Guidelines:

Any statistical and trial (field test) data that may be necessary to support the variety description should be attached to this form. Please include for trial data the plot size, number of replications, number of plants, plant spacing, trial locations and growing periods. Trials should normally be conducted at one place, in the region that the variety has been adapted for, with a minimum of one growing period in the United States. All comparative data should be determined from varieties entered in the same trials. The size of the plots should be such that plants or parts of plants may be removed for measuring and counting without prejudice to the observations which must be made at the end of the growing period. As a minimum, each test should include a total of 60 plants which should be divided between two or more replicates. Separate plots for observation and measuring can only be used if they have been subject to similar environmental conditions. To determine color for a plant or plant parts a recognized standard color chart must be used such as the Royal Horticultural Society (R.H.S.) Color Chart.

Reference Varieties:

The application variety should be compared to at least one reference variety preferably a set of reference varieties. The reference varieties should be market class standard varieties currently grown in the United States and or the variety(ies) most similar. The following varieties are recommended as market class standards to be used as reference varieties:

Yellow-flesh table-stock	**Yukon Gold**
Round-white table-stock	**Superior**
Chip-processing	**Atlantic, Snowden, Norchip**
Frozen-processing	**Russet Burbank**
Russet table-stock	**Russet Burbank, Russet Norkotah, Goldrush**
Red table-stock	**Red Pontiac, Red Norland, Red Lasoda**

If the applicant does not use one of the recommended reference varieties the PVP office may not have a complete description for the reference variety used; therefore the applicant may have to supply this description by completing an Exhibit C form for the reference variety.

Characteristics:

The plant type and growth habit characteristics are collected at early first bloom. Figure 1 is supplied to help visualize the growth habit. For this descriptor, look at the stems rather than the stems and foliage. Plant maturity is measured at natural vine senescence.

4

Stem characteristics are also collected at early bloom. Stem anthocyanin coloration is divided into two descriptors: Location and intensity. Figure 12 is supplied to give an example of stem wings.

Leaf characteristics are observed at early first bloom. Fully-developed leaves located on the middle third of the plant should be used. Leaf pubescence refers to general trichomes. Figure 2 is supplied for examples of leaf silhouette. Figure 3 should be used to describe terminal and primary leaflet shape. Figures 4 and 5 are used to describe the terminal and primary leaflet shape of tip and base, respectively. To measure the total number of primary leaflets pairs, collect 10 fully- developed petioles (with leaves attached from each replication and take the average number of secondary and tertiary leaflets. Figure 11 is supplied to define leaf characteristics. Glandular trichomes should be described through descriptor #12 (Additional Comments and Characteristics). Leaf stipules are shown in figure 13 for visual definition.

Inflorescence characteristics should be measured at early first bloom. Figures 6 and 7 are supplied to describe corolla and anther shape, respectively. Corolla, calyx, anther, stigma and pollen should be observed on newly opened flowers.

Berry production should be based on field-grown plants rather than greenhouse plants.

Tuber characteristics should be observed following harvest. Figures 9 and 10 are available to describe distribution of secondary color and tuber shape, respectively.

Disease and pest reactions should be based upon specific tests rather than field observations. Other diseases or pests reactions not requested can be described if it is felt that it would be helpful to the description.

Quality characteristics should be described according to the market use.

If the plant is transgenic, this gene insertion(s) should be described.

Chemical identification and any other characteristics can be describe if they are helpful in distinguishing the variety.

A rating system of 1-9 provides a scale for describing most characteristics in this form. Characteristic may be rated with intermediate values where the characteristic grades gradually from one extreme to another. For example, if the character states are described as: 3 = Small; 5 = Medium; 7 = Large; the other values of 1, 2, 4, 6, 8, or 9 may be selected.

Legend:

V = Application Variety

R1-R4 = Reference Varieties

* = Both the reference variety(ies) and application variety must be described for characteristics designated with an asterisk.

NAME OF APPLICANT(S)

Recot, Inc.

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PVPO NUMBER 9900367

ADDRESS (*Street and No. or R.F.D. No., City, State, and Zip Code*)

5000 Hopyard Drive
Suite 460
Pleasanton, CA 94588

VARIETY (V) NAME

FL1867

TEMPORARY OR EXPERIMENTAL DESIGNATION

RD 7-90-20

REFERENCE VARIETIES: Enter the reference variety name in the appropriate box

Reference Variety 1 (R1)	Reference Variety 2 (R2)	Reference Variety 3 (R3)	Reference Variety 4 (R4)
Atlantic			

1. MARKET CHARACTERISTICS:

MARKET CLASS:

1 = Yellow-flesh tablestock; 2 = Round-white tablestock; 3 = Chip-processing; 4 = Frozen-processing;
5 = Russet tablestock; 6 = Other_____.

V	R1	R2	R3	R4
3				

2. PLANT CHARACTERISTICS:

GROWTH HABIT: *(See figure 1)*
3 = Erect (>45° with ground); 5 = Semi-erect (30-45° with ground); 7 = Spreading.

V	R1	R2	R3	R4
7	5			

TYPE:
1 = Stem (foliage open, stems clearly visible); 2 = Intermediate; 3 = Leaf (Foliage closed, stems hardly visible)

V	R1	R2	R3	R4
1				

MATURITY: Days after planting (DAP) at vine senescence

V	R1	R2	R3	R4
110				

PLANTING DATE:

V	R1	R2	R3	R4
Feb. 1				

REGION/AREA:

V	R1	R2	R3	R4
Central Florida				

6

MATURITY CLASS:
1 = Very Early (<100 DAP); 2 = Early (100-110 DAP); 3 = Mid-season (111-120 DAP); 4 = Late (121-130 DAP); 5 = Very Late (>130 DAP).

V	R1	R2	R3	R4
2-3				

3. STEM CHARACTERISTICS: *Measure at early first bloom*

* STEM ANTHOCYANIN COLORATION:
1 = Absent; 3 = Weak; 5 = Medium; 7 = Strong; 9 = Very Strong

V	R1	R2	R3	R4
1	5			

STEM WINGS: *(See figure 12)*
1 = Absent; 3 = Weak; 5 = Medium; 7 = Strong; 9 = Very Strong

V	R1	R2	R3	R4
5	5			

4. LEAF CHARACTERISTICS:

LEAF COLOR: *(Observe fully developed leaves located on middle $^1/_3$ of plant)*
1 = Yellowish-green; 2 = Olive-green; 3 = Medium green; 4 = Dark green; 5 = Grey-green; 6 = Other_____

V	R1	R2	R3	R4
2	2			

LEAF COLOR CHART VALUE: Royal Horticulture Society Color Chart or Munsell Color Chart
(Observe fully developed leaves located on middle $^1/_3$ of plant & circle the appropriate color chart)

V	R1	R2	R3	R4
137B	137A			

LEAF PUBESCENCE DENSITY:
1 = Absent; 2 = Sparse; 3 = Medium; 4 = Thick; 5 = Heavy

V	R1	R2	R3	R4

LEAF PUBESCENCE LENGTH:
1 = None; 2 = Short; 3 = Medium; 4 = Long; 5 = Very long

V	R1	R2	R3	R4

(Note: Descriptor #19 can be used to describe the type and length of the glandular trichomes observed.)

* LEAF SILHOUETTE: *(See figure 2)*
1 = Closed; 3 = Medium; 5 = Open

V	R1	R2	R3	R4
5	3			

PETIOLES ANTHOCYANIN COLORATION:
1 = Absent; 3 = Weak; 5 = Medium; 7 = Strong; 9 = Very Strong

V	R1	R2	R3	R4
1	1			

LEAF STIPULES SIZE: *(See figure 13)*
1 = Absent; 3 = Small; 5 = Medium; 7 = Large

V	R1	R2	R3	R4

TERMINAL LEAFLET SHAPE: *(See figure 3 & 11)*
1 = Narrowly ovate; 2 = Medium ovate; 3 = Broadly ovate; 4 = Lanceolate; 5 = Elliptical; 6= Obovate; 7 = Oblong; 8 = Other_____

V	R1	R2	R3	R4
2				

TERMINAL LEAFLET TIP SHAPE: *(See figure 4 & 11)*
1 = Acute; 2 = Cuspidate; 3 = Acuminate; 4 = Obtuse; 5 = Other_____

V	R1	R2	R3	R4
3				

* TERMINAL LEAFLET BASE SHAPE: *(See figure 5 & 11)*
1 = Cuneate; 2 = Acute; 3 = Obtuse; 4 = Cordate; 5 = Truncate; 6 = Lobed; 7 = Other_____

V	R1	R2	R3	R4
4				

* TERMINAL LEAFLET MARGIN WAVINESS:
1 = Absent; 2 = Slight; 3 = Weak; 4 = Medium; 5 = Strong

V	R1	R2	R3	R4
3	3			

NUMBER OF PRIMARY LEAFLET PAIRS: *(See figure 11)*

AVERAGE:

V	R1	R2	R3	R4
3				

RANGE:

V	R1	R2	R3	R4
to	to	to	to	to

PRIMARY LEAFLET TIP SHAPE: *(See figure 4 & 11)*
1 = Acute; 2 = Cuspidate; 3 = Acuminate; 4 = Obtuse; 5 = Other_____

V	R1	R2	R3	R4
3				

8

* PRIMARY LEAFLET SIZE:

1 = Very Small; 2 = Small; 3 = Medium; 4 = Large; 5 = Very Large

V	R1	R2	R3	R4

PRIMARY LEAFLET SHAPE: *(See figure 3 & 11)*

1 = Narrowly ovate; 2 = Medium ovate; 3 = Broadly ovate; 4 = Lanceolate; 5 = Elliptical; 6= Obovate; 7 = Oblong; 8 = Other_____

V	R1	R2	R3	R4
1				

PRIMARY LEAFLET BASE SHAPE: *(See figure 5 & 11)*

1 = Cuneate; 2 = Acute; 3 = Obtuse; 4 = Cordate; 5 = Truncate; 6 = Lobed; 7 = Other_____

V	R1	R2	R3	R4
4				

NUMBER OF SECONDARY AND TERTIARY LEAFLET PAIRS: *(See figure 11)*

AVERAGE:

V	R1	R2	R3	R4
20				

RANGE:

V	R1	R2	R3	R4
8 to 10	to	to	to	to

5. INFLORESCENCE CHARACTERISTICS:

NUMBER OF INFLORESCENCE / PLANT:

AVERAGE:

V	R1	R2	R3	R4

RANGE:

V	R1	R2	R3	R4
to	to	to	to	to

NUMBER OF FLORETS / INFLORESCENCE:

AVERAGE:

V	R1	R2	R3	R4

RANGE:

V	R1	R2	R3	R4
to	to	to	to	to

* COROLLA INNER SURFACE COLOR CHART VALUE: (Royal Horticulture Society Color Chart) or Munsell Color Chart

(Measure predominant color of newly open flower & circle the appropriate color chart)

V	R1	R2	R3	R4
155C	82D			

* COROLLA INNER SURFACE COLOR: *(Measure predominant color of newly open flower)*
1 = White; 2 = Red-violet; 3 = Blue-violet; 4 = Other_____

V	R1	R2	R3	R4
1				

COROLLA SHAPE: *(See figure 6)*
1 = Very rotate; 2 = Rotate; 3 = Pentagonal; 4 = Semi-stellate; 5 = Stellate

V	R1	R2	R3	R4
3	3			

CALYX ANTHOCYANIN COLORATION:
1 = Absent; 3 = Weak; 5 = Medium; 7 = Strong; 9 = Very strong

V	R1	R2	R3	R4
1	3			

ANTHER COLOR CHART VALUE: Royal Horticulture Society Color Chart or Munsell Color Chart
(Measure when newly opened flower is fully expanded and circle the appropriate color chart)

V	R1	R2	R3	R4
14B	2A			

ANTHER SHAPE: *(See figure 7)*
1 = Broad cone; 2 = Narrow cone; 3 = Pear shape cone; 4 = Loose; 5 = Other_____

V	R1	R2	R3	R4
2	3			

POLLEN PRODUCTION:
1 = None; 3 = Some; 5 = Abundant

V	R1	R2	R3	R4

STIGMA SHAPE: *(See figure 8)*
1 = Capitate; 2 = Clavate; 3 = Bi-lobed

V	R1	R2	R3	R4
1				

STIGMA COLOR CHART VALUE: (Royal Horticulture Society Color Chart) or Munsell Color Chart
(Circle the appropriate color chart)

V	R1	R2	R3	R4
152A				

BERRY PRODUCTION: *(Under field conditions)*
1 = None; 3 = Low; 5 = Moderate; 7 = Heavy; 9 = Very heavy

V	R1	R2	R3	R4

10

5. TUBER CHARACTERISTICS:

* PREDOMINANT SKIN COLOR:

1 = White; 2 = Light Yellow; 3 = Yellow; 4 = Buff; 5 = Tan; 6 = Brown; 7 = Pink; 8 = Red; 9 = Purplish-red; 10 = Purple; 11 = Dark purple-black; 12 = Other_____

V	6	R1		R2		R3		R4	

PREDOMINANT SKIN COLOR CHART VALUE: Royal Horticulture Society Color Chart or Munsell Color Chart
(Circle the appropriate color chart)

V	199C	R1		R2		R3		R4	

SECONDARY SKIN COLOR:

1 = Absent; 2 = Present, please describe: _____

V		R1		R2		R3		R4	

SECONDARY SKIN COLOR CHART VALUE: Royal Horticulture Society Color Chart or Munsell Color Chart
(Circle the appropriate color)

V		R1		R2		R3		R4	

SECONDARY SKIN COLOR DISTRIBUTION:

1 = Eyes; 2 = Eyebrows; 3 = Splashed; 4 = Scattered; 5 = Spectacled; 6 = Stippled; 7 = Other_____

V		R1		R2		R3		R4	

SKIN TEXTURE:

1 = Smooth; 2 = Rough (flaky); 3 = Netted; 4 = Russetted; 5 = Heavily russetted; 6 = Other_____

V	1	R1		R2		R3		R4	

* TUBER SHAPE: *(See figure 10)*

1 = Compressed; 2 = Round; 3 = Oval; 4 = Oblong; 5 = Long; 6 = Other_____

V	3	R1		R2		R3		R4	

TUBER THICKNESS:

1 = Round; 2 = Medium thick; 3 = Slightly flattened; 4 = Flattened; 5 = Other_____

V	3	R1		R2		R3		R4	

TUBER LENGTH (mm):

AVERAGE:

V	75	R1	67	R2		R3		R4	

RANGE:

V	45 to 118	R1	43 to 112	R2	to	R3	to	R4	to

STANDARD DEVIATION:

V		R1		R2		R3		R4	

AVERAGE WEIGHT OF SAMPLE TAKEN:

V		R1		R2		R3		R4	

TUBER WIDTH (mm):

AVERAGE:

V	69	R1	62	R2		R3		R4	

RANGE:

V	51 to 95	R1	46 to 84	R2	to	R3	to	R4	to

STANDARD DEVIATION:

V		R1		R2		R3		R4	

AVERAGE WEIGHT OF SAMPLE TAKEN:

V		R1		R2		R3		R4	

TUBER THICKNESS (mm):

AVERAGE:

V	54	R1	51	R2		R3		R4	

RANGE:

V	39 to 88	R1	39 to 70	R2	to	R3	to	R4	to

STANDARD DEVIATION:

V		R1		R2		R3		R4	

AVERAGE WEIGHT OF SAMPLE TAKEN:

V		R1		R2		R3		R4	

TUBER EYE DEPTH:

1 = Protruding; 2 = Shallow; 3 = Intermediate; 4 = Deep; 5 = Very deep

V	2	R1	2	R2		R3		R4	

12

9900367

TUBER LATERAL EYES
1 = Protruding; 2 = Shallow; 3 = Intermediate; 4 = Deep; 5 = Very deep

V		R1		R2		R3		R4	

NUMBER EYE / TUBER:

AVERAGE:

V		R1		R2		R3		R4	

RANGE:

V	to	R1	to	R2	to	R3	to	R4	to

DISTRIBUTION OF TUBER EYES:
1 = Predominantly apical; 2 = Evenly distributed

V	2	R1		R2		R3		R4	

PROMINENCE OF TUBER EYEBROWS:
1 = Not prominent; 2 = Slight prominence; 3 = Medium prominence; 4 = Very prominent; 5 = Other_____

V	1	R1	1	R2		R3		R4	

* PRIMARY TUBER FLESH COLOR CHART VALUE: (Royal Horticulture Society Color Chart) or Munsell Color Chart
(Circle the appropriate color chart)

V	158B	R1		R2		R3		R4	

SECONDARY TUBER FLESH COLOR:
1 = Absent; 2 = Present, please describe: _____

V		R1		R2		R3		R4	

SECONDARY TUBER FLESH COLOR CHART VALUE: Royal Horticulture Society Color Chart or Munsell Color Chart
(Circle the appropriate color chart)

V		R1		R2		R3		R4	

NUMBER OF TUBERS / PLANT:
1 = Low (<8); 2 = Medium (8 -15); 3 = High (>15)

V	2	R1	2	R2		R3		R4	

9. QUALITY CHARACTERISTICS:

CHIEF MARKET:
Chip processing

9900367

SPECIFIC GRAVITY (wt. air /wt. air - wt. water)
1 < 1.060; 2 = 1.060-1.069; 3 = 1.070-1.079; 4 = 1.080-1.089; 5 > 1.090

V	5	R1		R2		R3		R4	

TOTAL GLYCOALKALOID CONTENT (mg. / 100 g. fresh tuber)

V	11.01	R1		R2		R3		R4	

Mean of five tests

OTHER QUALITY CHARACTERISTICS: Describe any other quality characteristics that may aid in identification, (e.g. chip-processing, french fry processing, baking, boiling, after-cooking darkening). Please attach data and corresponding protocol.

11. CHEMICAL IDENTIFICATION:

Describe chemical traits of the candidate variety that aid in its identification (e.g. protein or DNA electrophoresis). Please attach data and the corresponding protocol.

FL1867 was "fingerprinted" by DNA electrophoresis. See Exhibit D.

12. ADDITIONAL COMMENTS AND CHARACTERISTICS:

Include any additional descriptors that would be useful in distinguishing the candidate variety.

Exhibit C-1 -- Photograph of FL1867 Lightsprout
Exhigit C-2 -- Photograph of tuber

6. DISEASES CHARACTERISTICS:

DISEASES REACTION: 0 = NOT TESTED; 1 = RESISTANT; 3 = MODERATELY RESISTANT;
5 = MODERATELY SUSCEPTIBLE; 7=SUSCEPTIBLE; 9=HIGHLY SUSCEPTIBLE

BACTERIAL RING ROT, FOLIAR REACTION:

V	R1	R2	R3	R4
7				

BACTERIAL RING ROT, TUBER REACTION:

V	R1	R2	R3	R4
7				

LATE BLIGHT:

V	R1	R2	R3	R4

PLRV (LEAF ROLL):

V	R1	R2	R3	R4
0				

PVX:

V	R1	R2	R3	R4
0				

PVY:

V	R1	R2	R3	R4
5				

OTHER: Common Scab

V	R1	R2	R3	R4
7	7			

OTHER: _____

V	R1	R2	R3	R4

7. PESTS CHARACTERISTICS:

PEST REACTION: 0 = NOT TESTED; 1 = RESISTANT; 3 = MODERATELY RESISTANT;
5 = MODERATELY SUSCEPTIBLE; 7=SUSCEPTIBLE; 9=HIGHLY SUSCEPTIBLE

GOLDEN NEMATODE:

V	R1	R2	R3	R4
1				

OTHER: Cyst Nematode

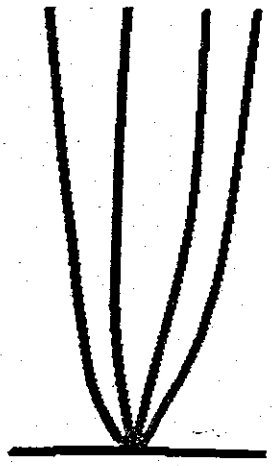
V	R1	R2	R3	R4
1				

8. GENE TRAITS:

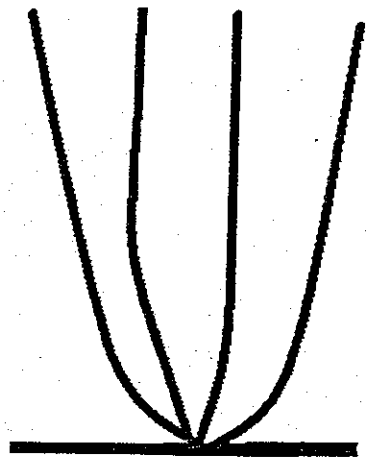
INSERTION OF GENES: ☐ YES ☒ NO

If YES, describe the gene(s) introduced or attach information:

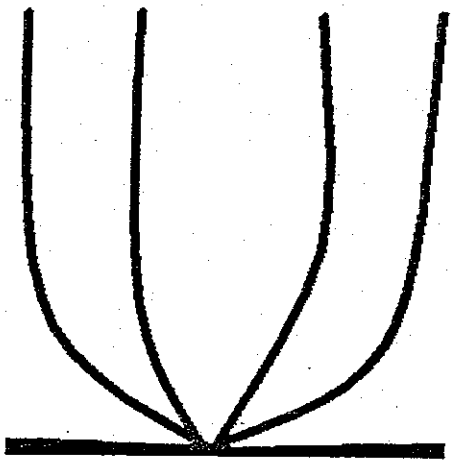
Figure 1: Growth Habit



3 = Erect
>45^0 with ground

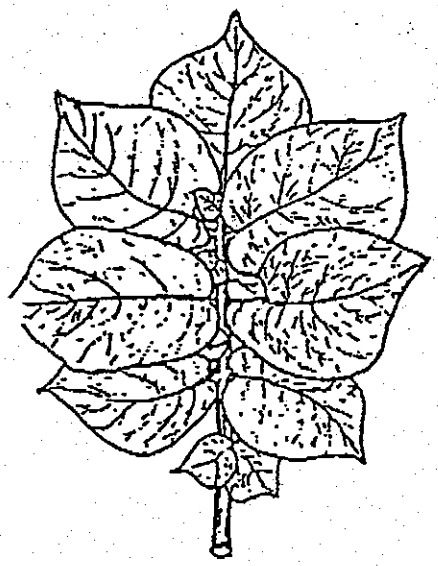


5 = Semi-erect
30-45^0 with ground

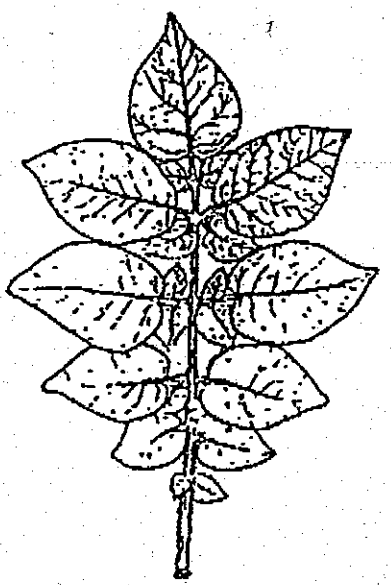


7 = Spreading
<30^0 with ground

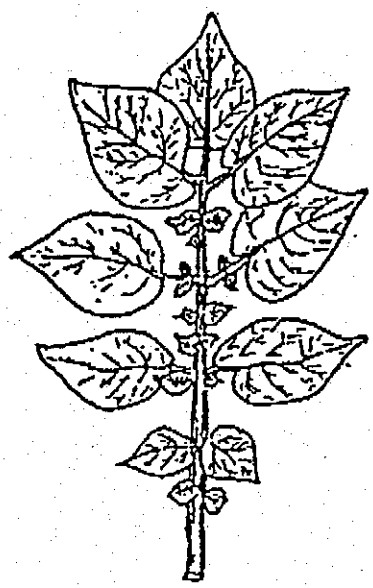
Figure 2: Leaf Silhouette



1 = Closed



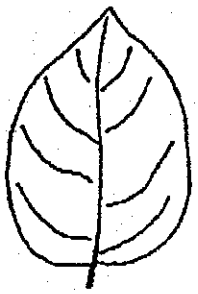
3 = Medium



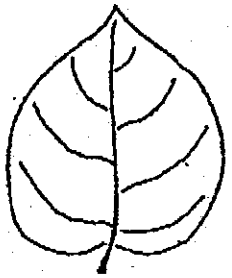
5 = Open

Figure 3: Terminal Leaflet Shape / Primary Leaflet Shape

1=Narrowly Ovate

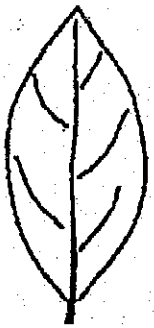


2=Medium Ovate

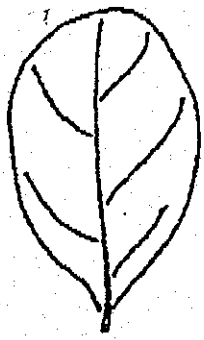


3=Broadly Ovate

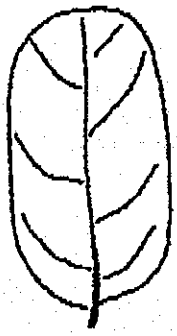
4=Lanceolate



5=Elliptical



6=Obovate

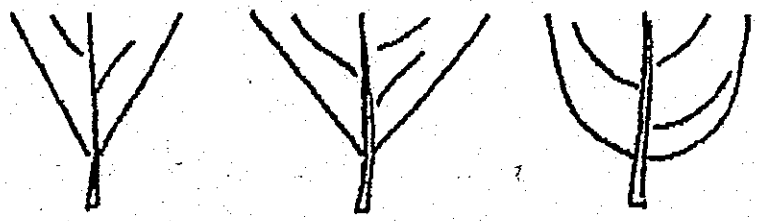


7=Oblong

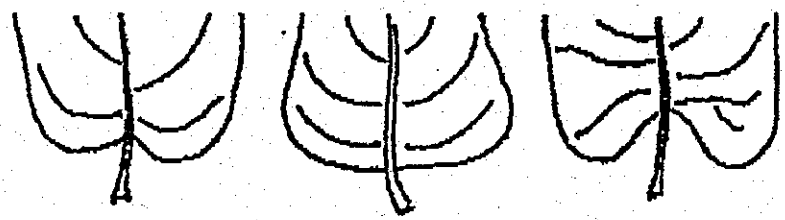
Figure 4: Terminal Leaflet Shape of Tip / Primary Leaflet Shape of Tip

1=Acute 2=Cuspidate 3=Acuminate 4=Obtuse

Figure 5: Terminal Leaflet Shape of Base / Primary Leaflet Shape of Base

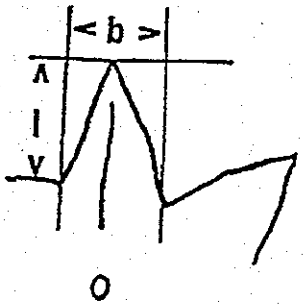


1=Cuneate 2=Acute 3=Obtuse



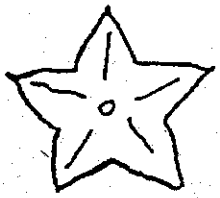
4=Cordate 5=Truncate 6=Lobed

Figure 6: Corolla Shape

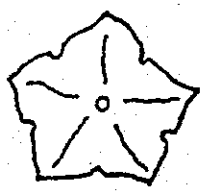


O

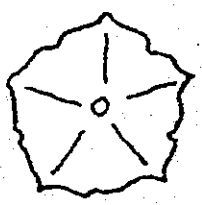
stellate
l > b



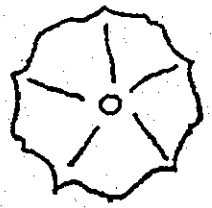
semi-stellate
l = b



pentagonal
l < b

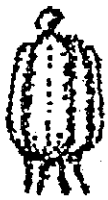


rotate
l << b



very rotate
l <<< b

Figure 7: Anther Shape



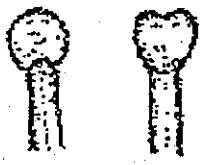
1=Broad cone

2=Narrow cone

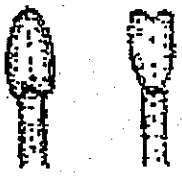
3=Pear shape cone

4=Loose

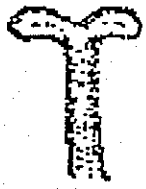
Figure 8: Stigma Shape



1=Capitate

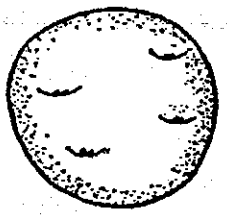


2=Clavate

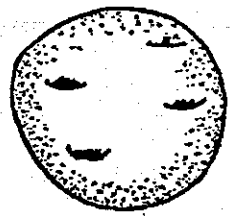


3=Bilobed

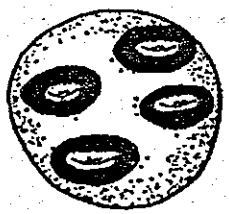
Figure 9: Distribution of Secondary Tuber Color



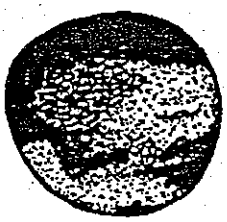
1=Eyes



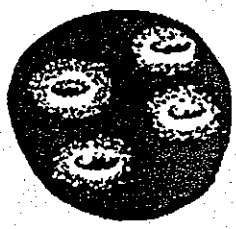
2=Eyebrows



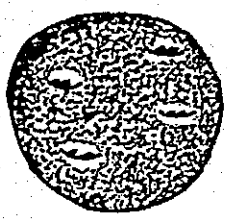
3=Splashed



4=Scattered

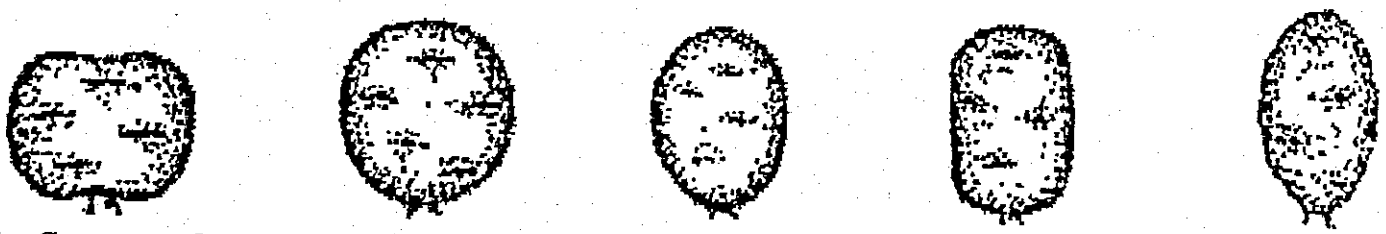


5=Spectacled



6=Stippled

Figure 10: Tuber Shape



1=Compressed 2=Round 3=Oval 4=Oblong 5=Long

Figure 11: Leaf Dissection

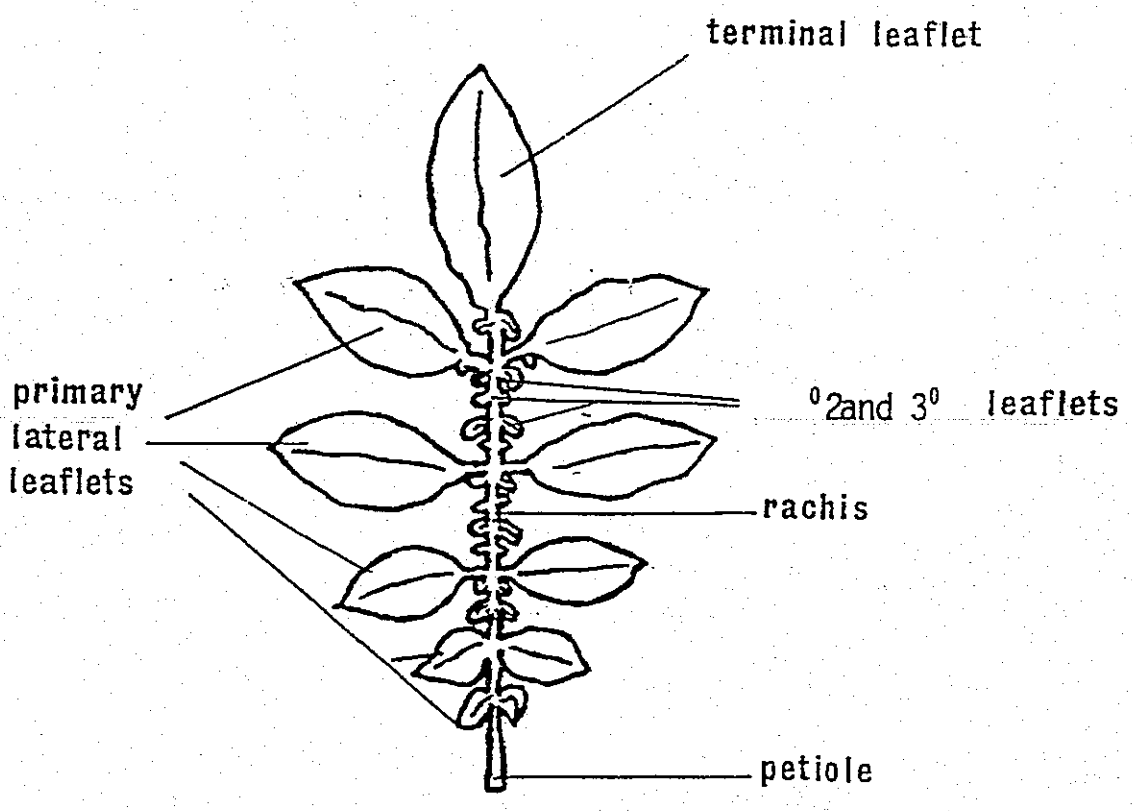


Figure: 12 Stem Wings

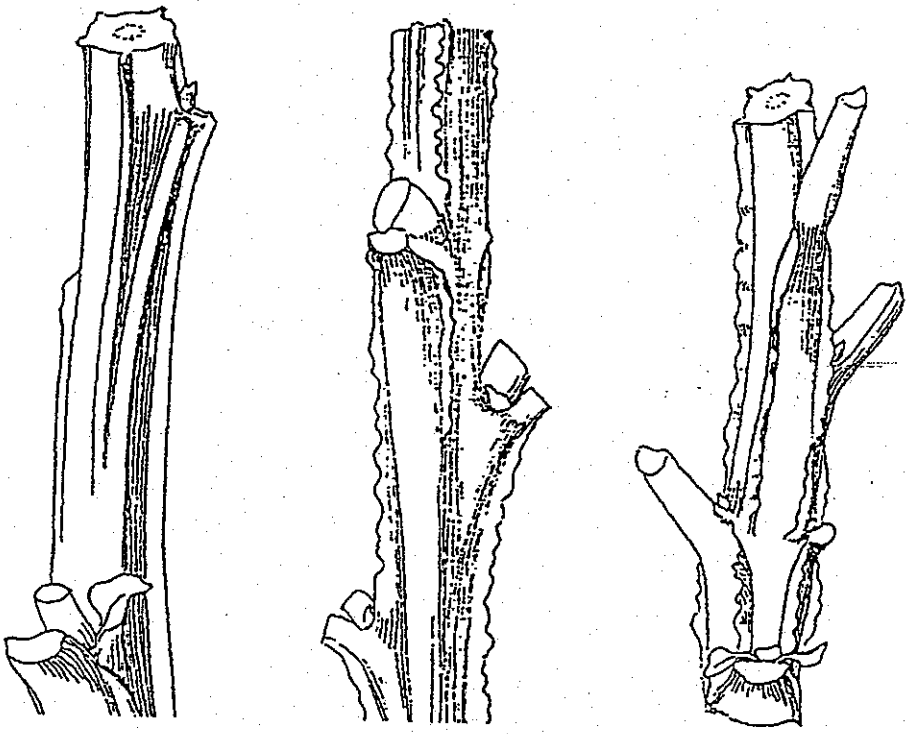


Figure 13: Leaf Stipules:

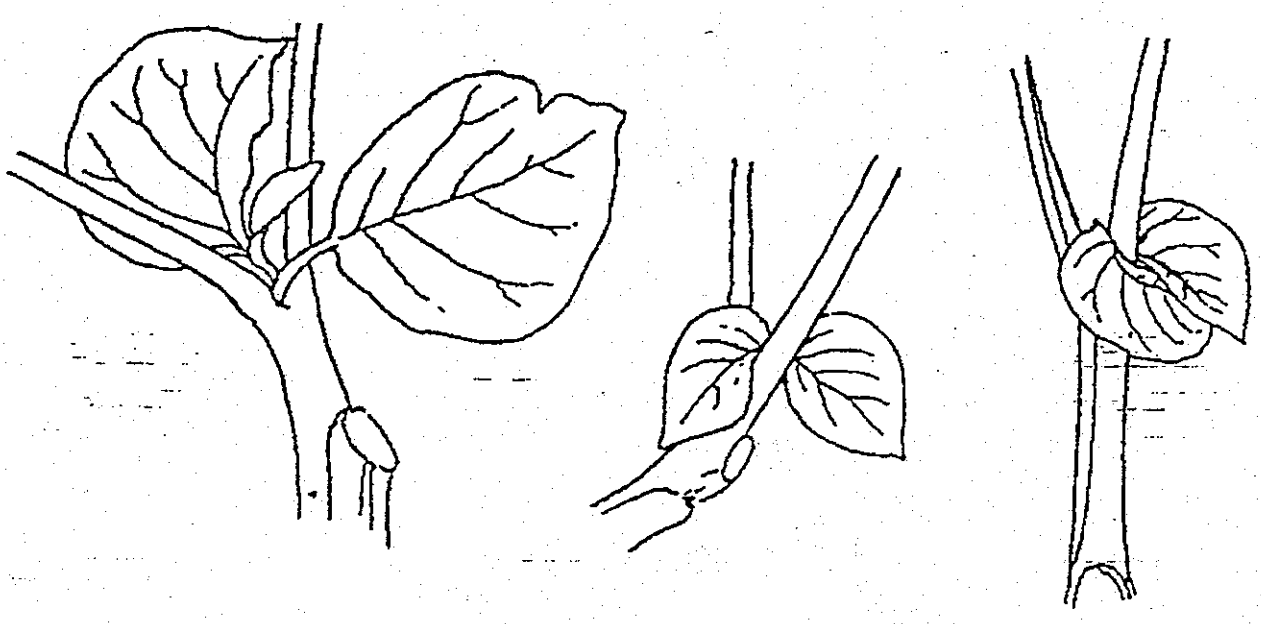


EXHIBIT D. Additional Description of the Variety

1) Isozyme fingerprint of FL 1867 with reference to methodology. Comparison of fingerprint of FL 1867 with that of Atlantic, showing distinct patterns for each variety.

2) Photograph of typical FL 1867 plants in the field at Rhinelander

3) Photograph of typical compound leaf of FL 1867 from Rhinelander field

4) Photograph of FL 1867 flowers

5) Photocopy of typical leaf silhouette of FL 1867

6) Summary of 100-tuber sample of tuber dimensions of FL 1867 compared to 100 tubers of Atlantic. Each 100-tuber sample was grown at the same time and under the same conditions.

EXHIBIT E. Statement of the Basis of the Applicant's Ownership

The variety FL 1867 for which Plant Variety Protection is hereby sought was developed by breeders who have assigned all rights to inventions and discoveries made by them to Ricot, Inc., with no ownership rights of any kind retained by the breeders.

EXHIBIT F. Deposit Statement

Upon issuance of the Plant Variety Protection Certificate for FL 1867, applicant will deposit tissue culture for the tubers in a public repository.

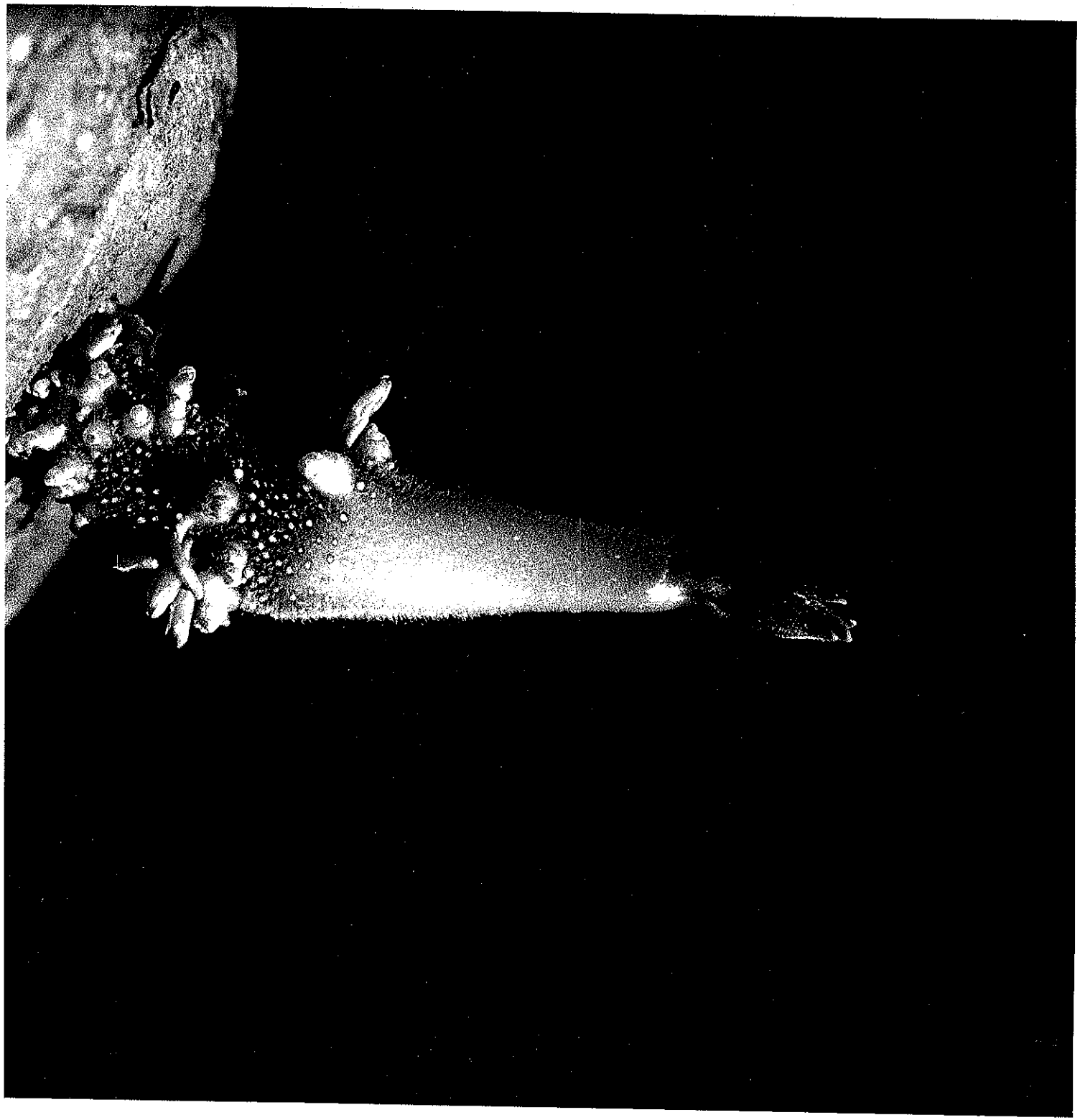
EXHIBIT D-1

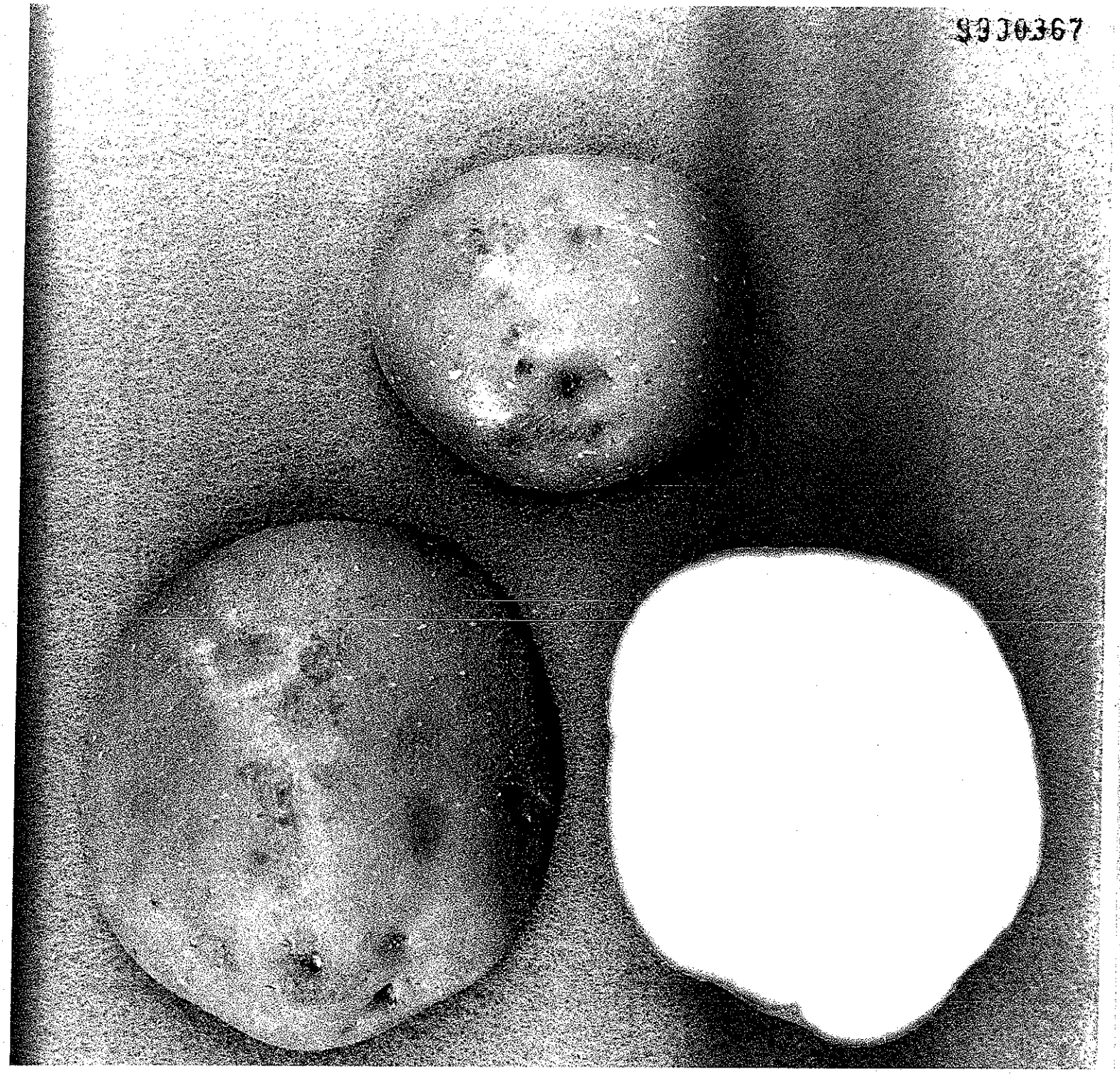
Isozyme electrophoresis fingerprints of FL1867 compared to Atlantic

Variety	Mdh-1	Mdh-2	6-Pgdh-3	Idh-1	Pgi-1	Aps-1	Got-1	Got-2	Pgm-1	Pgm-2	Dia-1	Prx-1	Adh-1
1995													
Atlantic	2223	2223	1122	1112	2222	1111	4444	3555	1112	2223	1112	1144	2222
FL1867	2233	2222	1122	--	2222	--	3344	3335	1133	2233	--	1113	--

Source of Data: Dr. David Douches, Michigan State University, 1995

Procedures and allelic designations used are according to Douches, D.S. and K. Ludlam. 1991. Electrophoretic Characterization of North American Potato Cultivars. Am. Potato J. 68:767-780.

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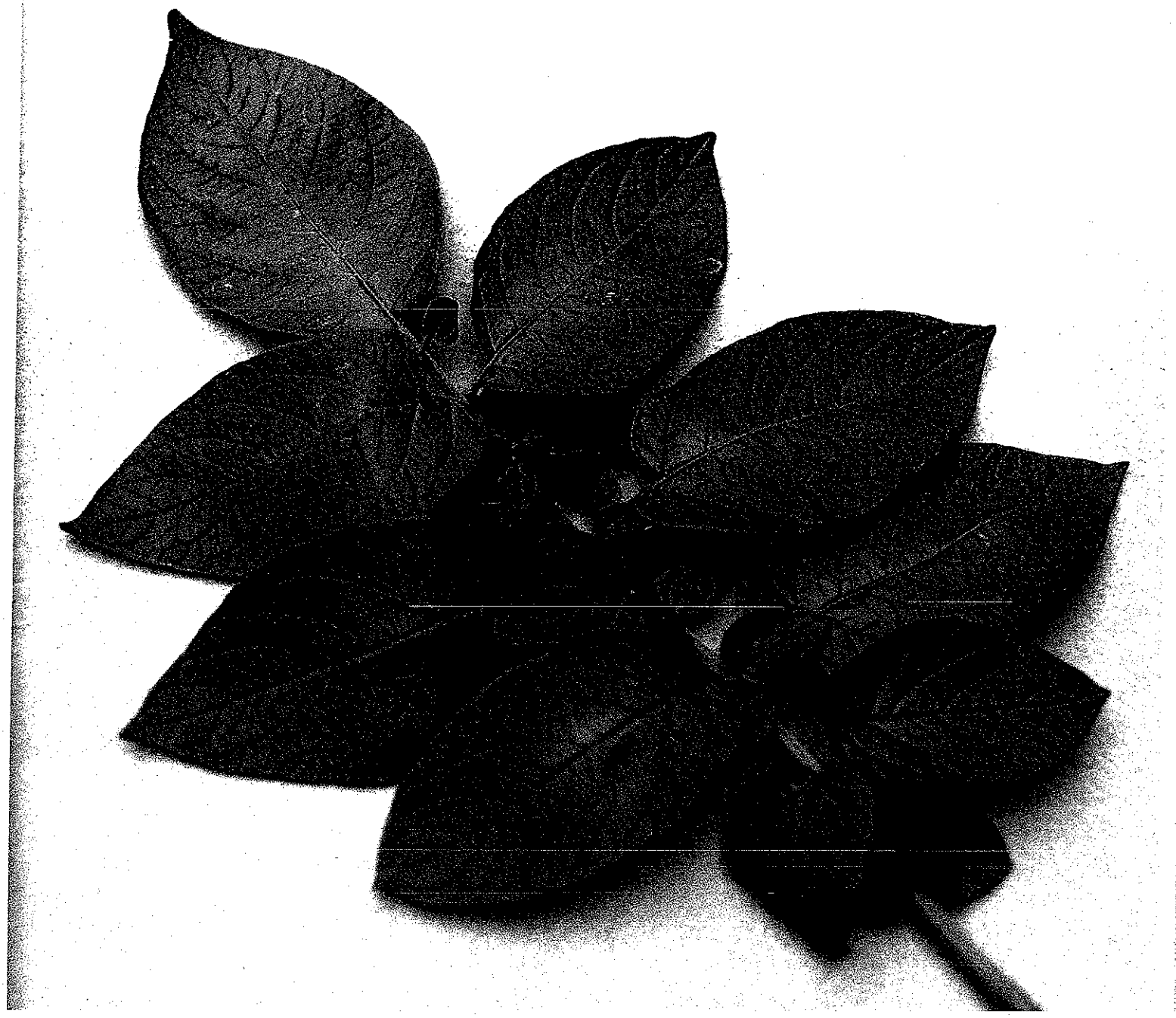

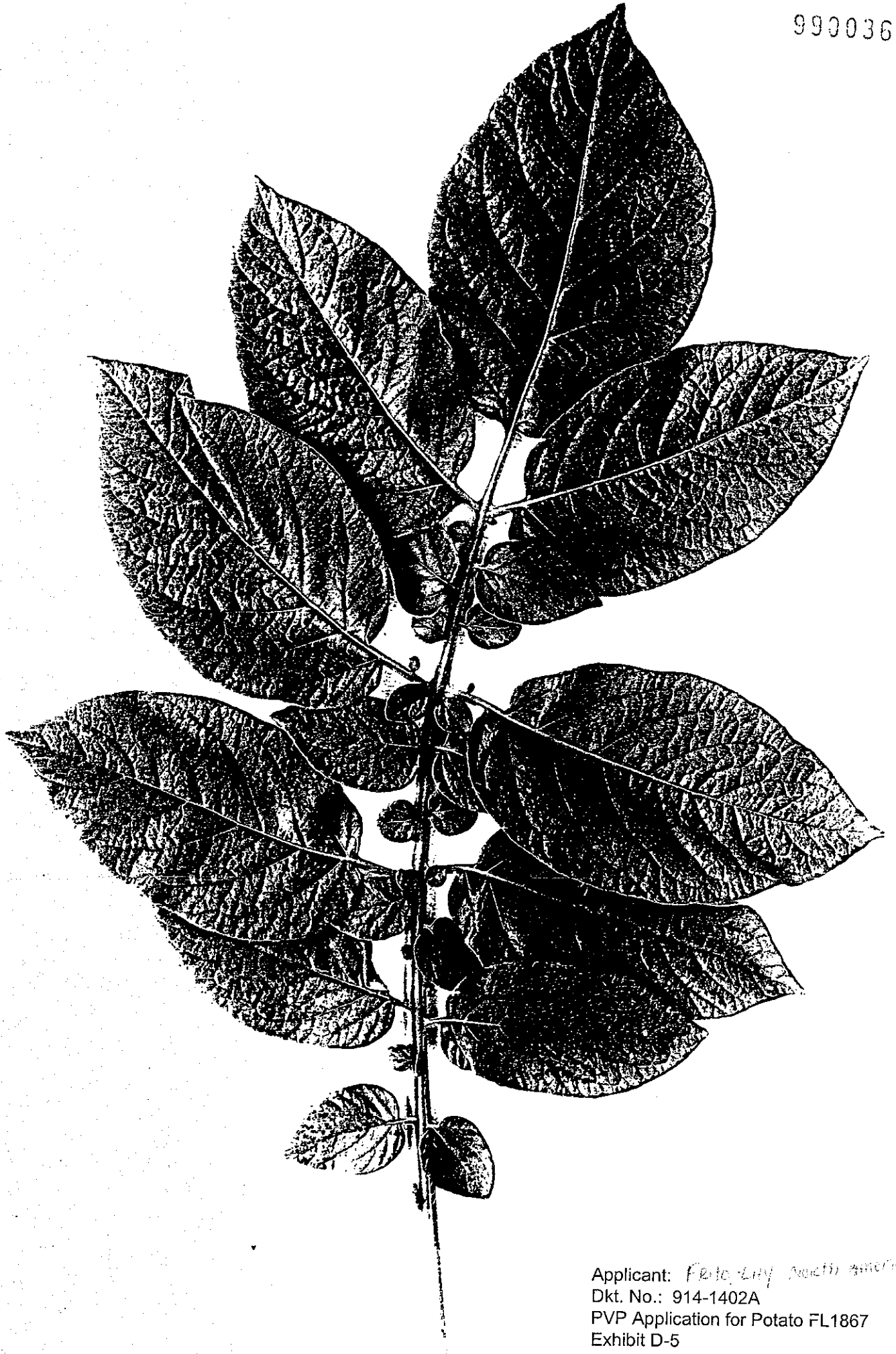

Applicant: Potato Variety Management Institute
Dkt. No.: 914-1402A
PVP Application for Potato FL1867
Exhibit D-5

FL 1867 Tuber Sizes

Length(mm)	Width	Depth
85	78	59
88	72	58
88	69	53
45	48	41
85	86	59
83	85	87
84	86	88
62	47	36
88	78	59
112	78	62
78	70	62
45	51	42
81	70	53
100	86	75
74	64	48
61	59	41
92	78	53
83	80	60
73	77	60
88	59	56
81	77	62
64	59	51
72	70	53
81	65	54
70	60	45
72	59	56
78	66	57
59	71	48
81	79	59
83	70	62
72	70	51
110	79	59
85	78	59
78	70	52
83	78	56
85	81	53
61	60	51
118	95	79
90	76	54
81	71	60
64	66	55
83	64	45
61	67	47
72	74	51
86	78	59
72	64	50
89	78	54
85	77	54
74	67	45
89	71	58

Applicant: ~~Recot, Inc.~~ Frito-Lay North America, Inc.
Dkt. No.: 914-1402A
PVP Application for Potato FL1867
Exhibit D-6; Page 1 of 2

81	78	62
57	60	46
75	64	54
81	65	52
65	64	47
83	79	59
78	61	52
78	59	52
89	79	59
69	70	56
67	55	47
73	65	51
81	77	64
71	61	44
64	65	51
81	70	62
65	66	53
57	61	42
70	77	58
70	56	46
81	70	51
78	62	47
58	57	40
81	70	56
64	71	47
66	65	56
85	67	62
85	71	55
56	56	49
81	66	61
70	65	56
52	59	40
88	79	61
76	65	51
57	57	47
82	75	51
70	64	51
61	53	39
88	78	66
79	68	51
52	56	47
72	66	53
80	68	60
58	68	42
79	69	56
71	69	50
73	77	50
88	79	58
69	66	47
64	53	40
75.08	**68.82**	**53.88**

Applicant: ~~Recot, Inc.~~ Frito-Lay North America, Inc.
Dkt. No.: 914-1402A
PVP Application for Potato FL1867
Exhibit D-6; Page 2 of 2

ATLANTIC TUBER SIZES

(in centimeters)

Length	Width	Depth
6.8	6.5	5.8
9	8	7
7.1	7	6.1
6.3	5	4.2
7.1	6.7	5
6.8	6	4.4
6.6	6	4.8
5.5	5.8	5
6.3	6.5	4.2
7.4	7.7	6.7
6.6	6.7	4.8
9	8	6.1
9	7.4	6.1
5.9	6.7	5.5
11.2	8.4	7
6.8	6.7	5.5
8.6	7.7	6.1
7.6	6.4	5.5
7.6	6.8	5
4.3	5.5	4.8
5.5	4.6	4.4
6.3	5.5	4.3
6.6	5.5	5.5
8.6	8	6.7
7.1	7	5.8
6.6	6	5.4
9.6	8	6.1
9	8	5.8
7.4	7.3	5.7
6.3	6	6
6.2	6	4.8
5.5	5	4.8
5.9	6	5.1
7.4	7.4	6
6.3	5	4
8.3	6.7	5.1
5.5	5	4.1
5.5	5	4.1
5.5	6.7	4.8
4.7	4.8	4.2
5.9	4.9	4.4
6.3	4.8	4
5.5	5	3.9

ATLANTIC TUBER SIZES

(in centimeters)

Length	Width	Depth
5.5	5.5	4.8
7.4	7.4	5
6.8	7.7	6.1
6.3	4.8	4.2
6.6	5.5	5
5.9	6	4.8
7.4	6.7	5.5
5	5.8	4.8
5.5	5.6	4.2
5.5	5.5	4.9
5.9	5.5	4
6.6	6.1	5
6.7	6.7	5.5
7.4	5.5	4.4
6.6	6.1	5.8
6.8	6.7	5.5
5.3	7	5.7
6.3	5.5	4.2
5.9	5.8	5
7.1	6.7	5
7.6	7.7	5.8
5.9	5.5	4.2
8.6	7.7	6
6	5.9	4.8
7.4	7	5.5
6.6	5	4.2
9	7.7	6.1
6.2	5.1	4.1
7.4	6.6	5
6.6	5.6	4.4
8.3	7.4	6.7
5.5	5.5	4.7
7.6	6.7	5.5
6.3	5.8	4.8
5.5	5	4.8
8.3	6.5	5
7.4	6.1	4.8
7.1	5.9	4.8
4.7	6	4.8
7.1	6.7	6
7.4	7.4	5.5
7.4	6.7	5
7.4	7.4	5.5

Frito-Lay North America, Inc.
Applicant: ~~Recot, Inc.~~
Dkt. No.: 914-1402A
PVP Application for Potato FL1867
Exhibit D-6; Page 2 of 3

ATLANTIC TUBER SIZES

(in centimeters)

Length	Width	Depth
7.1	6.7	6.1
5	5	4.2
5.4	5.6	5
5.5	5.5	4.3
6.6	6.7	5
5.6	5	4
5.5	5.5	4.2
6	5.1	4.6
7.4	7.4	5.9
5.9	5.6	5
5.9	5	5
5.5	5	4.2
6.7	5	4
4.3	5.8	5
6.7	**6.2**	**5.1**

9900367

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U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

EXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paper Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). The information is held confidential until the certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S)	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME
Frito-Lay North America, Inc.	RD 7-90-20	FL 1867
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and country)	**5. TELEPHONE** (Include area code)	**6. FAX** (Include area code)
7701 Legacy Drive Plano, Texas 75024	972/334-3822	972/334-5965
	7. PVPO NUMBER 9900367	

8. Does the applicant own all rights to the variety? Mark an "X" in the appropriate block. If no, please explain. ☒ YES ☐ NO

9. Is the applicant (individual or company) a U.S. National or a U.S. based company? If no, give name of country ☒ YES ☐ NO

10. Is the applicant the original owner? ☒ YES ☐ NO If no, please answer one of the following:

a. If the original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. National(s)?

☐ YES ☐ NO If no, give name of country

b. If the original rights to variety were owned by a company(ies), is (are) the original owner(s) a U.S. based company?

☐ YES ☐ NO If no, give name of country

11. Additional explanation on ownership *(if needed, use the reverse for extra space)*:

Please Note:

Plant variety protection can only be afforded to the owners (not licensees) who meet the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed the final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definitions.